

EXHIBIT X

Jeffrey D. Ullman



Jeff Ullman is the [Stanford W. Ascherman](#) Professor of Computer Science (Emeritus). His interests include database theory, database integration, data mining, and education using the information infrastructure.

[What's New](#) | [Polemics](#) | [Books](#) | [Biographical Information](#)

What's New

Third Edition of *Mining of Massive Datasets*

The third edition is now available in hardcopy from [Here](#). By agreement with Cambridge University Press, it may be downloaded gratis [Here](#).

Gradience News

Gradience is a system for creating and administering class exercises. These homeworks and programming labs are designed to teach students, rather than merely to test. Through the concept of a "root question," students can repeat the same work several times, and are given advice when they make an error. Directions for using the system, either as a student or an instructor can be found [Here](#).

Free Book: *Foundations of Computer Science*

In 1992, Al Aho and I published a book called *Foundations of Computer Science*, whose goal was to present CS theory as something integrally connected to CS practice. For example, we viewed recursive programs, recursive definitions, and inductive proofs as the same thing. We believe the book deserved a better fate, but the publisher took it out of print years ago. Having received back the rights to the book, we are happy to make it freely available [Here](#).

I Would Like to Hear From You, But...

I generally enjoy getting emails, even if it is to tell me of a mistake in a book. In fact, those notes are particularly important; they help not only me and my coauthors, but more importantly, later readers of the book. I try to respond helpfully and in a timely manner to email that isn't spam. However, there are two classes of emails that I think should not be written and that get a form response. [Read More](#).

Polemics


As part of my role as old curmudgeon (replacing my previous role as young curmudgeon), I have been writing a few articles about things I think especially stupid. I hope to write more.

- [The Battle for Data Science](#). This article, published in the *Data Engineering Bulletin*, talks about my concerns with how Statistics has attempted to make data science and machine learning its own.
- [Experiments as Research Validation -- Have We Gone too Far?](#). For a long time, I've had the feeling that we -- the database community and maybe the CS community at large -- put too much stock in experiments to justify research, and not enough stock in traditional analysis of algorithms. So I wrote a little essay on the topic.
- [Answers to All Questions Iranian](#). Am I the only one who gets peppered with questions from Iranians? They're technical questions or political questions, but there seems to be a system behind them. So I decided to save time and answer them all here.
- [Fundamentalism](#). Shortly after 9/11/01, I wrote this article on fundamentalism --- the nonnegotiable belief in some unproven hypothesis. It's been added to periodically, and rambles a bit, over the foolishness of the Palestinian leadership, the drug warriors, the politically correct, the anti-abortion crowd, and a few others. This article also advocated research on a system like "Total Information Awareness," although I doubt that it had any influence on that development.
- [4-Way Stop Signs](#). Dumb traffic policies have always been way up on my list of things I'd like to fix but can't. The global problem is that those with the power to decide, focus on specific risks, which they can see. But in solving one problem, they often introduce far more harmful effects --- e.g., pollution. The problem is that the harm is distributed sufficiently widely so that no one can point to a particular death and attribute it to a particular instance of some dumb traffic policy. This polemic, originally written for Club Nexus (the prototype for Orkut), focuses on the 4-way stop signs on Stanford Campus, but the principles apply broadly.
- [Attack of the Fifty Foot NIMBY's](#). Throughout my life, I've been infuriated by the tendency of our social structure to allow theft, as long as the loss is distributed in tiny parcels among a large number of people. "Affirmative action" is probably the best known of these subtle thefts, but this essay is not

about affirmative action. Rather, it's about a theft that occurs on our streets every day, yet no one notices.

- [Software Patents](#). This article was written for the Knuth Prize. Don, who is of course ineligible for the Knuth Prize, would probably say we should get rid of all patents. I don't agree, but I do feel that in the software area, things have gotten out of hand. Here, I tried to argue that courts should apply the same standards that are used when choosing papers worthy of presentation at a conference, to the matter of whether a certain software idea deserves a patent.
- [University of California \(Non\)Confidentiality Policy](#). The UC system, unlike every other university in this country, refuses to offer the maximum confidentiality that the law allows for letters of recommendation that they solicit. Members of the various computer-science departments in the UC system understand that this policy makes letter-writing irrelevant and deprives them of an important source of advice. However, the policy comes from so high up that it is impossible for them to do anything about it. I have therefore endeavored to put in place a solution similar to that used in response to the equally foolish "Buckley amendment," which gave student applicants the right to see their recommendations. The document referred to is a pledge that the person about whom you are writing a letter can sign, to assure you that you can write an honest and frank letter without fear of later reprisal or embarrassment. I wish the UC departments would themselves solicit this pledge, in order to preserve your anonymity as well as your privacy, but apparently they are forbidden to do so.

Books --- Past and Future

For some sets of notes and materials for supplementing current books, click here: 

Biographical Information

- [A brief biography](#).
- [A listing of all publications](#)

Jeffrey D. Ullman
ullman @ cs.stanford.edu
650-494-8016 (home)
650-725-2588 (FAX)